

## M 4.8, 6 km SE of Maria Antonia, Puerto Rico

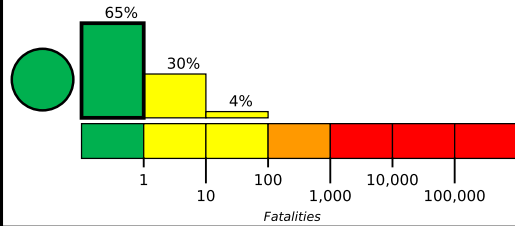
Origin Time: 2020-12-24 16:56:39 UTC (Thu 12:56:39 local)

Location: 17.9331° N 66.8451° W Depth: 10.0 km

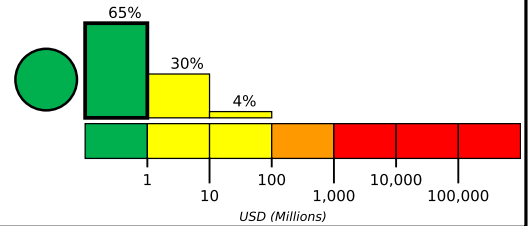
Created: 4 weeks, 1 day after earthquake

### Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.



### Estimated Economic Losses

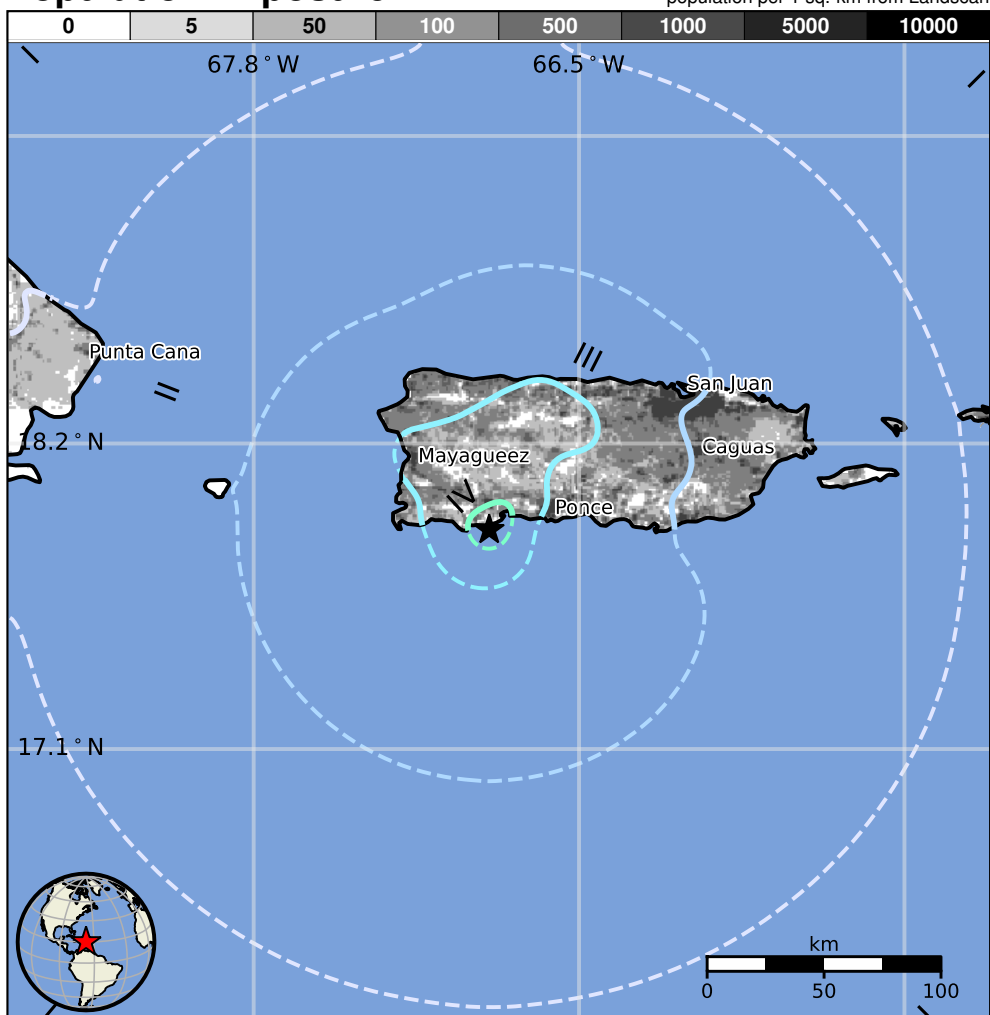


## Estimated Population Exposed to Earthquake Shaking

| ESTIMATED POPULATION EXPOSURE (k=x1000) |                       | 45k*     | 2,733k | 610k  | 34k      | 0        | 0           | 0          | 0        | 0        |
|---|-----------------------|----------|--------|-------|----------|----------|-------------|------------|----------|----------|
| ESTIMATED MODIFIED MERCALLI INTENSITY   |                       | I        | II-III | IV    | V        | VI       | VII         | VIII       | IX       | X+       |
| PERCEIVED SHAKING                       |                       | Not felt | Weak   | Light | Moderate | Strong   | Very Strong | Severe     | Violent  | Extreme  |
| POTENTIAL DAMAGE                        | Resistant Structures  | None     | None   | None  | V. Light | Light    | Moderate    | Mod./Heavy | Heavy    | V. Heavy |
|   | Vulnerable Structures | None     | None   | None  | Light    | Moderate | Mod./Heavy  | Heavy      | V. Heavy | V. Heavy |

\*Estimated exposure only includes population within the map area.

## Population Exposure



### Structures

Overall, the population in this region resides in structures that are a mix of vulnerable and earthquake resistant construction. The predominant vulnerable building types are mud wall and informal (metal, timber, GI etc.) construction.

### Historical Earthquakes

| Date (UTC) | Dist. (km) | Mag. | Max MMI(#) | Shaking Deaths |
|------------|------------|------|------------|----------------|
| 1979-03-23 | 235        | 6.6  | VI(605k)   | 0              |
| 1980-11-12 | 335        | 5.9  | VII(87k)   | —              |
| 1984-06-24 | 266        | 6.7  | VII(326k)  | 5              |

### Selected City Exposure

from GeoNames.org

| MMI | City            | Population  |
|-----|-----------------|-------------|
| V   | Indios          | 2k          |
| V   | Guayanilla      | 5k          |
| V   | Guanica         | 9k          |
| V   | Maria Antonia   | 1k          |
| V   | Magas Arriba    | 1k          |
| V   | Fuig            | 1k          |
| III | <b>Ponce</b>    | <b>153k</b> |
| III | <b>San Juan</b> | <b>418k</b> |
| II  | Bayamon         | 203k        |
| II  | <b>Caguas</b>   | <b>87k</b>  |
| II  | Carolina        | 170k        |

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

<https://earthquake.usgs.gov/earthquakes/eventpage/pr2020359052#pager>

bold cities appear on map.

(k = x1000)

Event ID: pr2020359052